

FIG.1

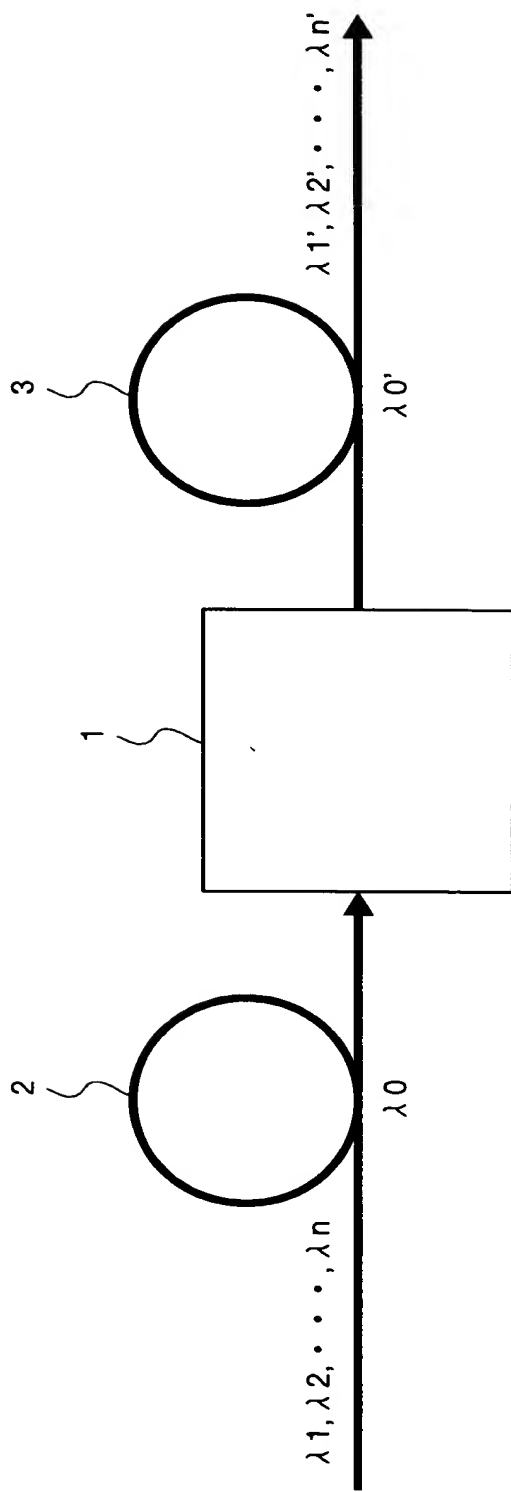


FIG.2A

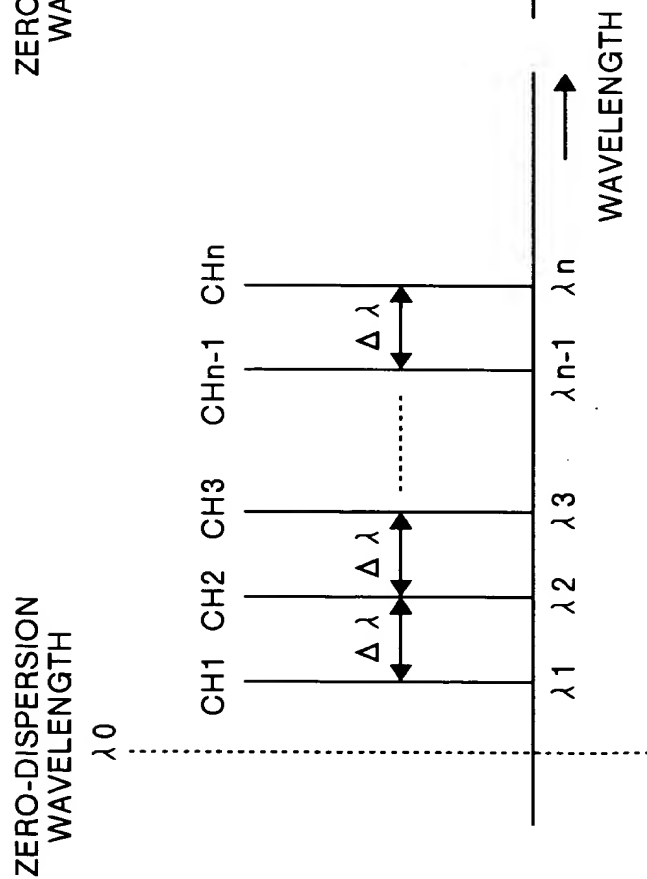


FIG.2B

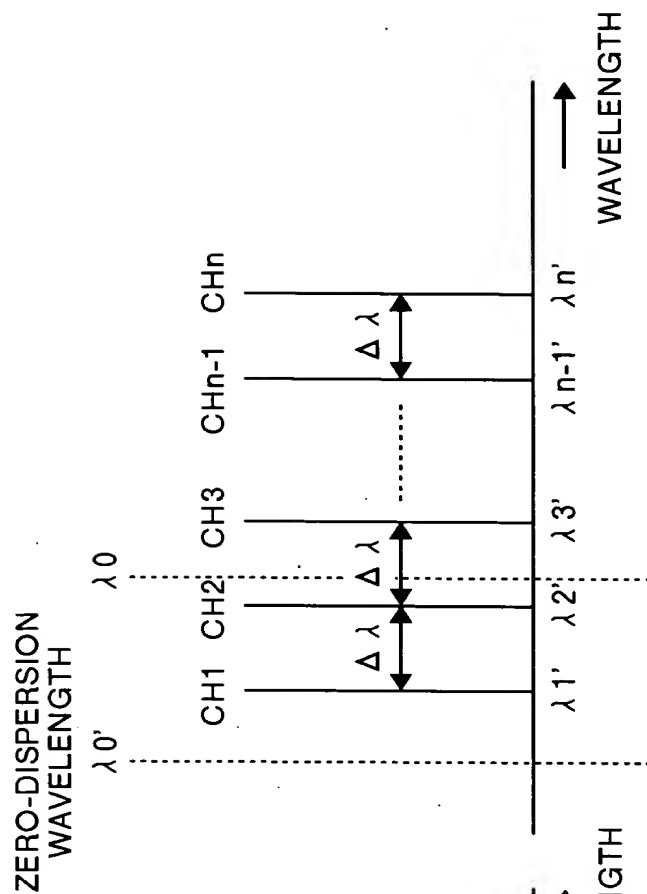


FIG.3

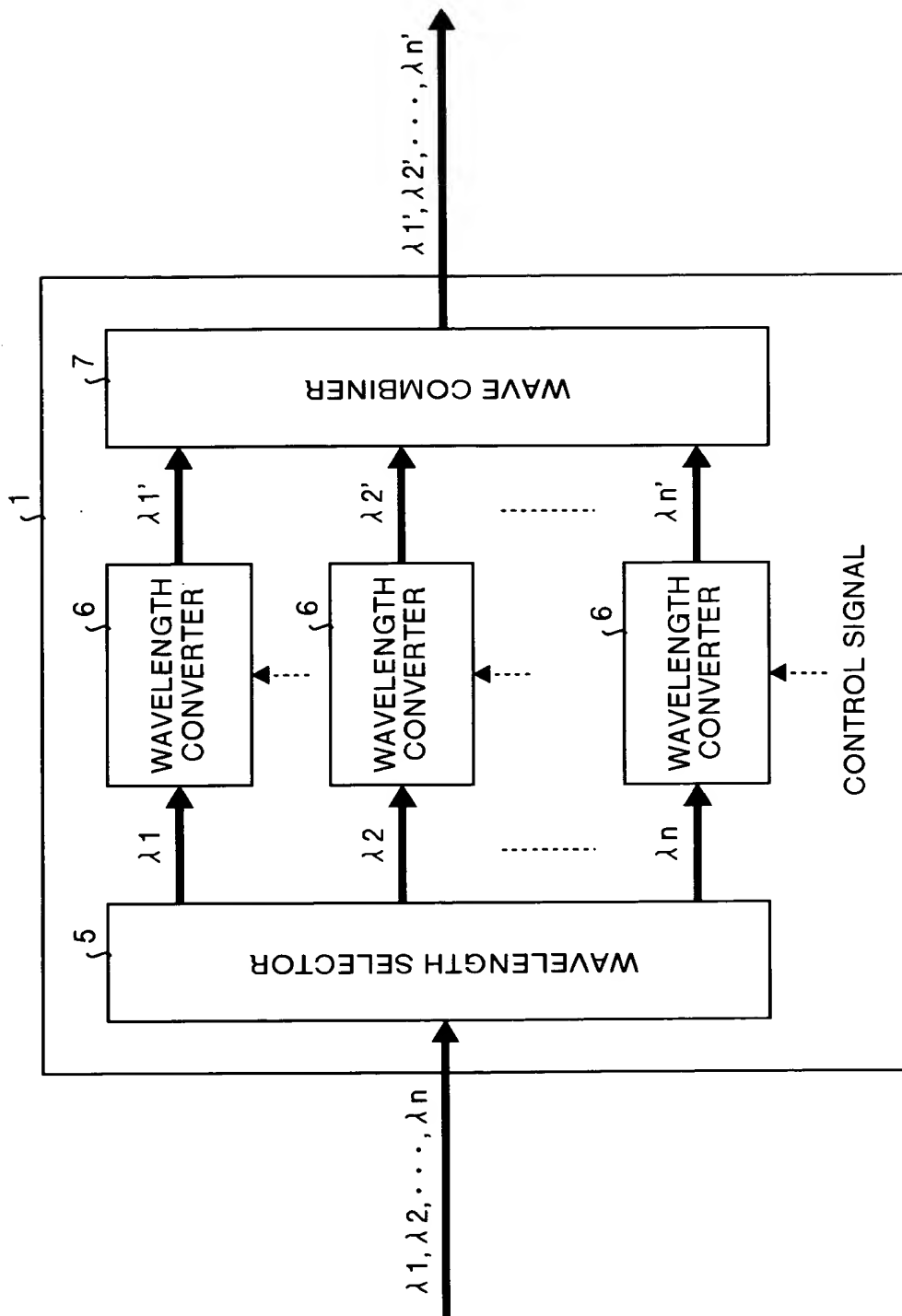


FIG.4

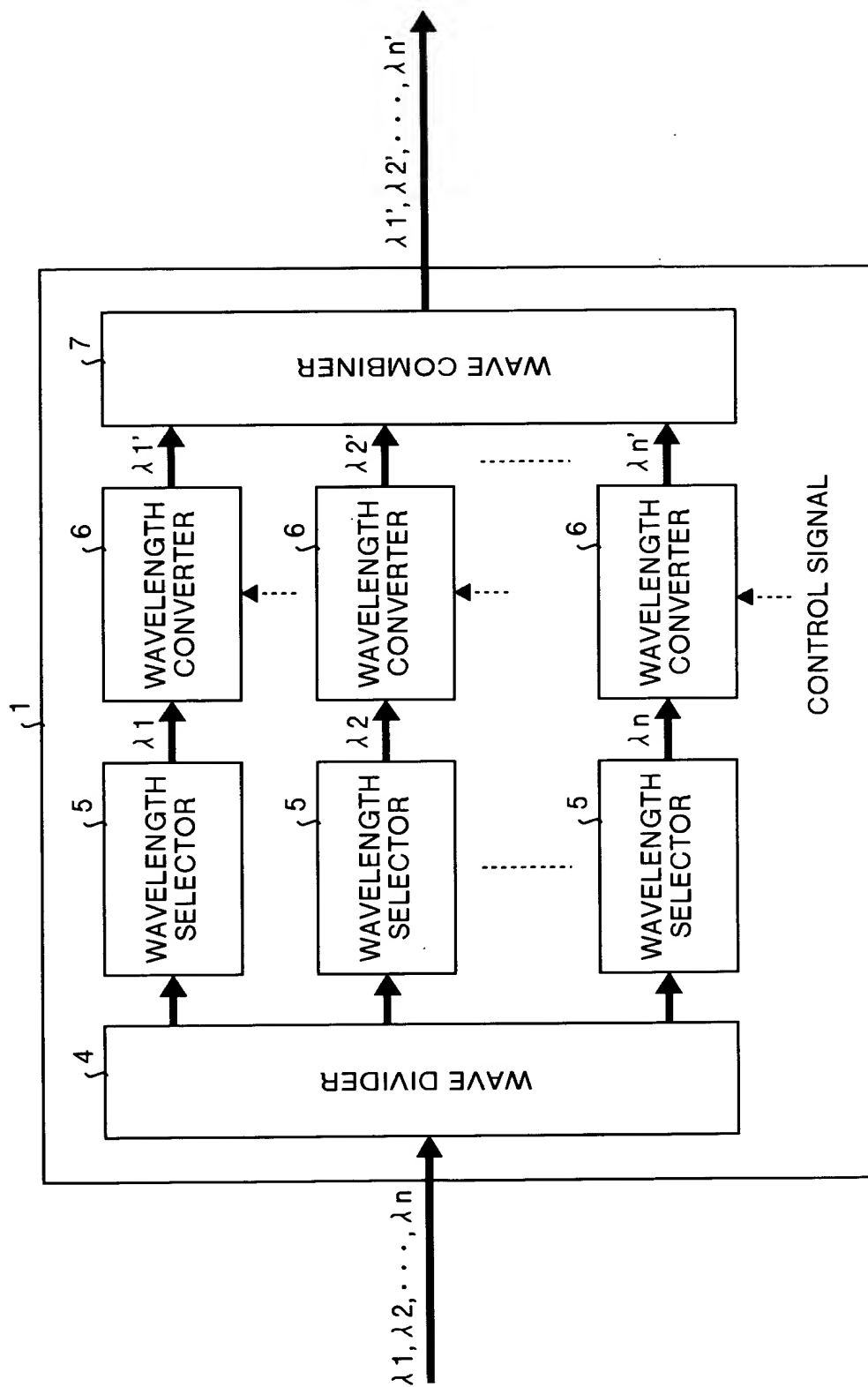


FIG.5

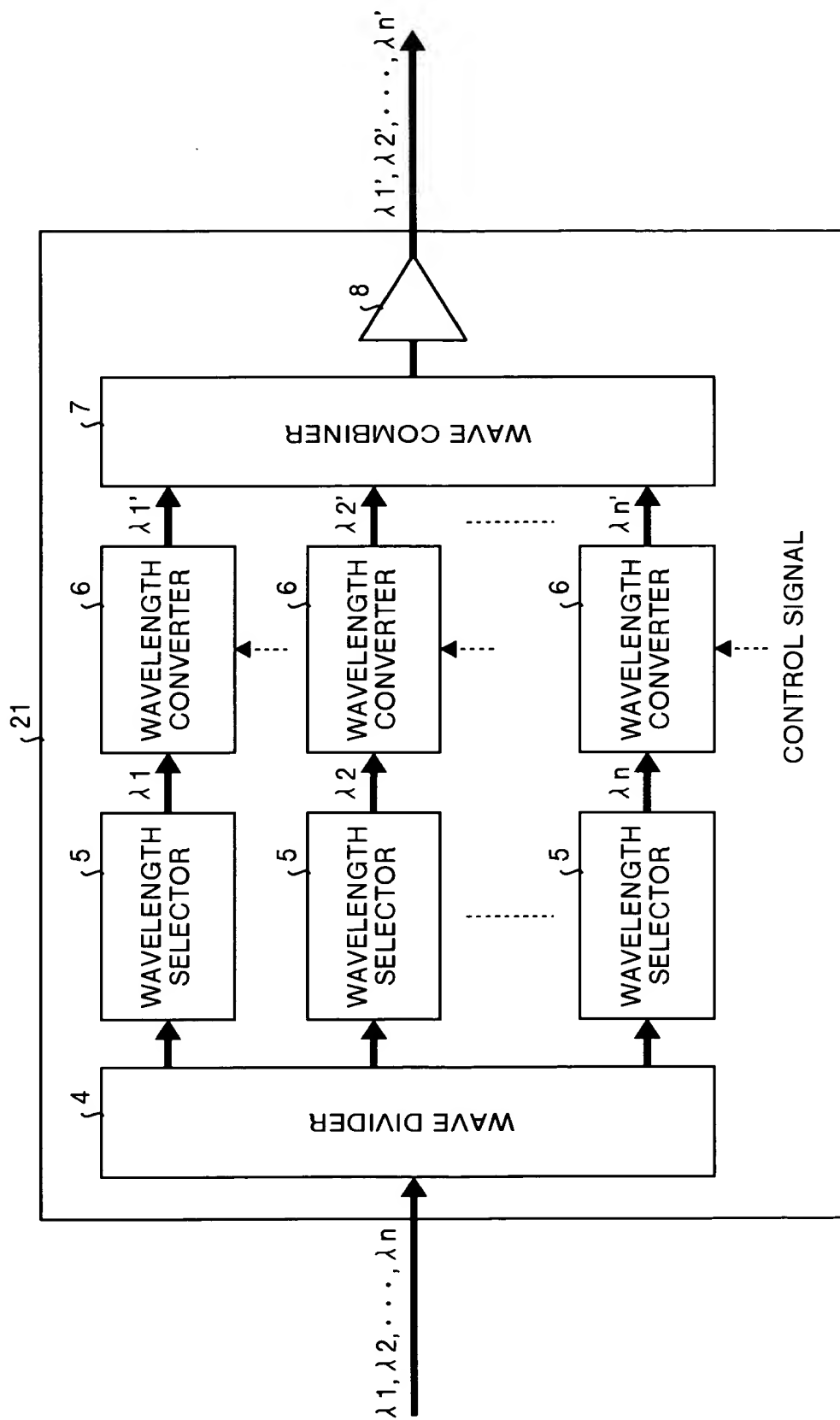


FIG.6

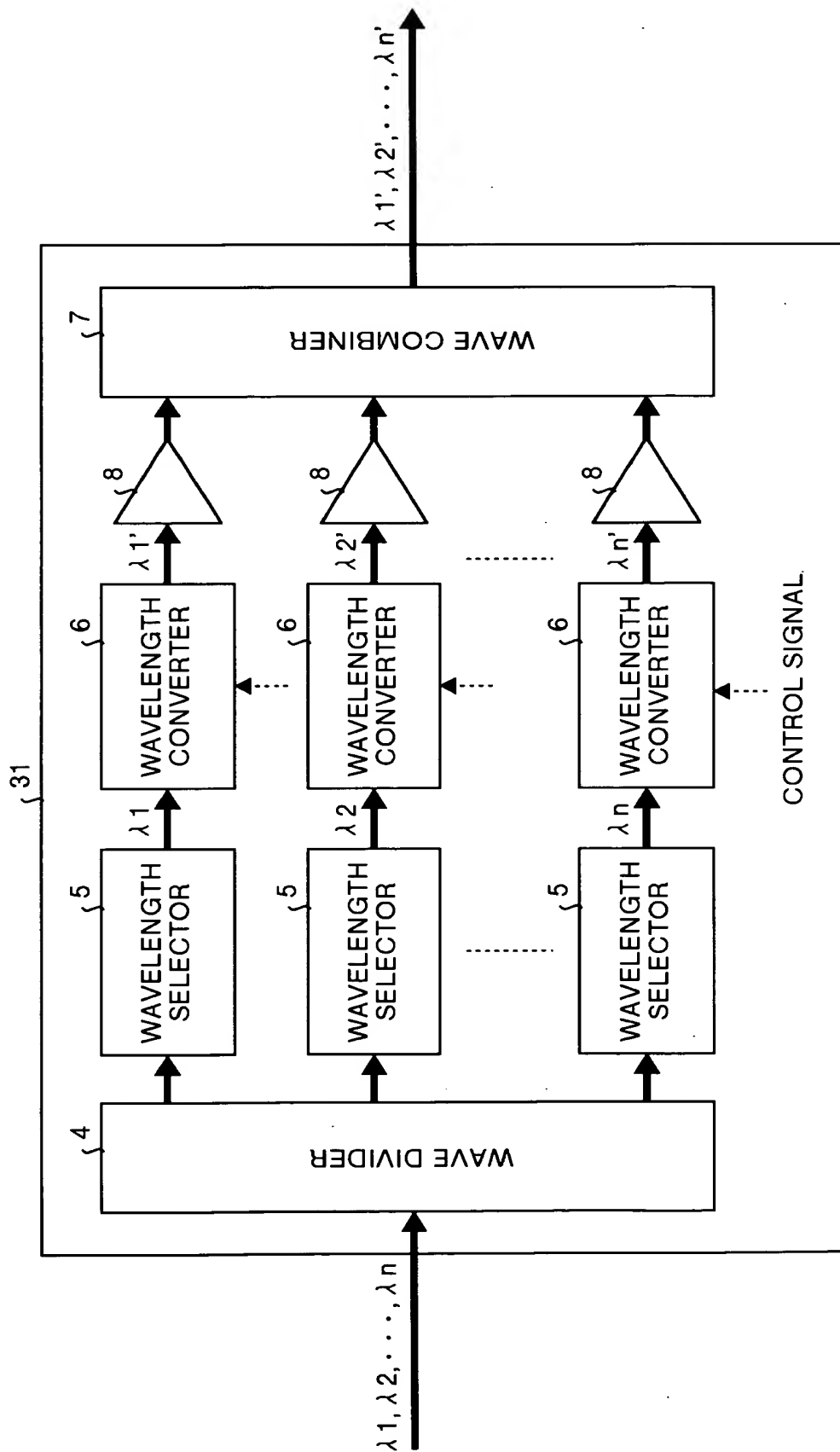


FIG.7

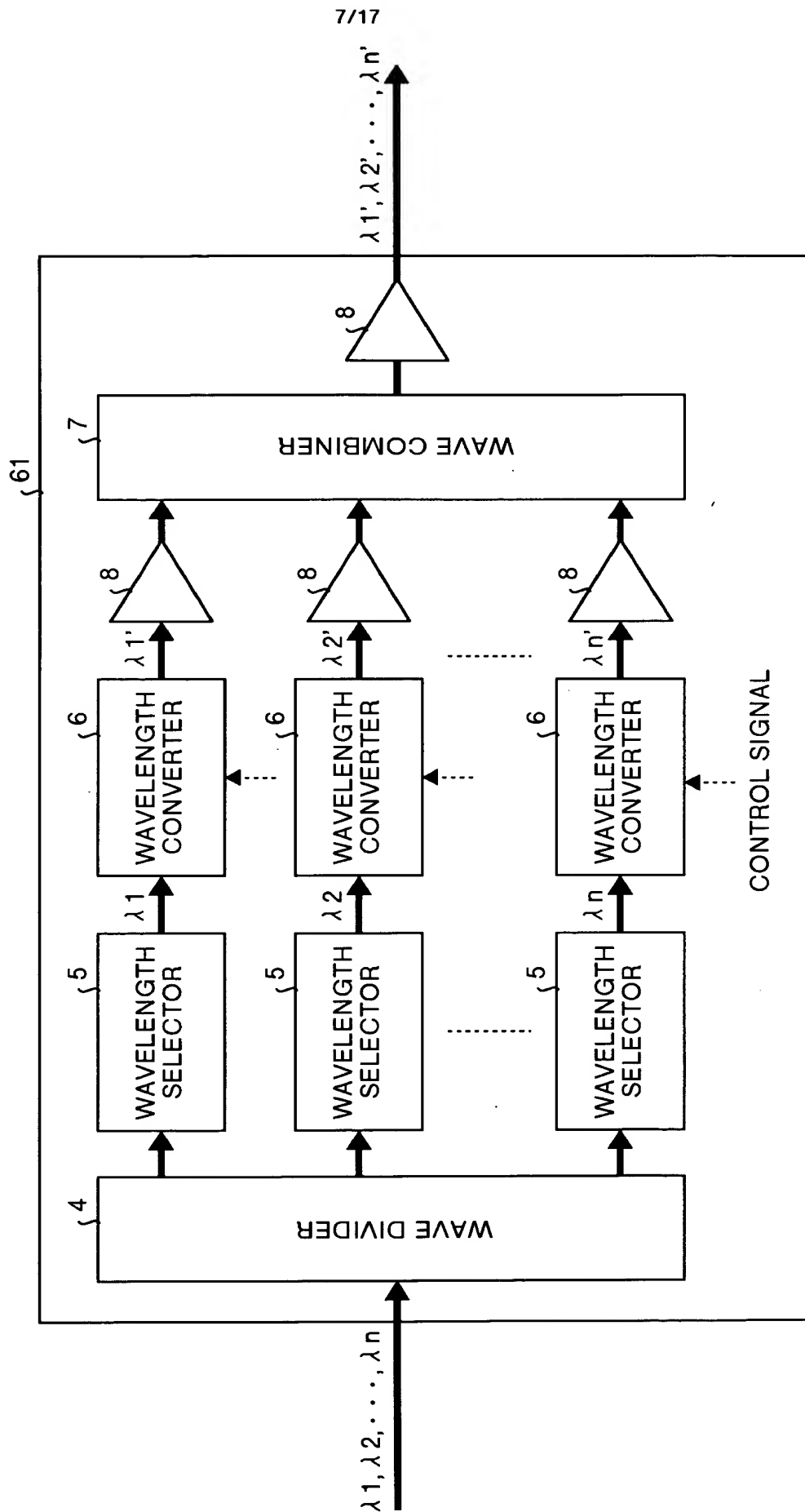


FIG. 8

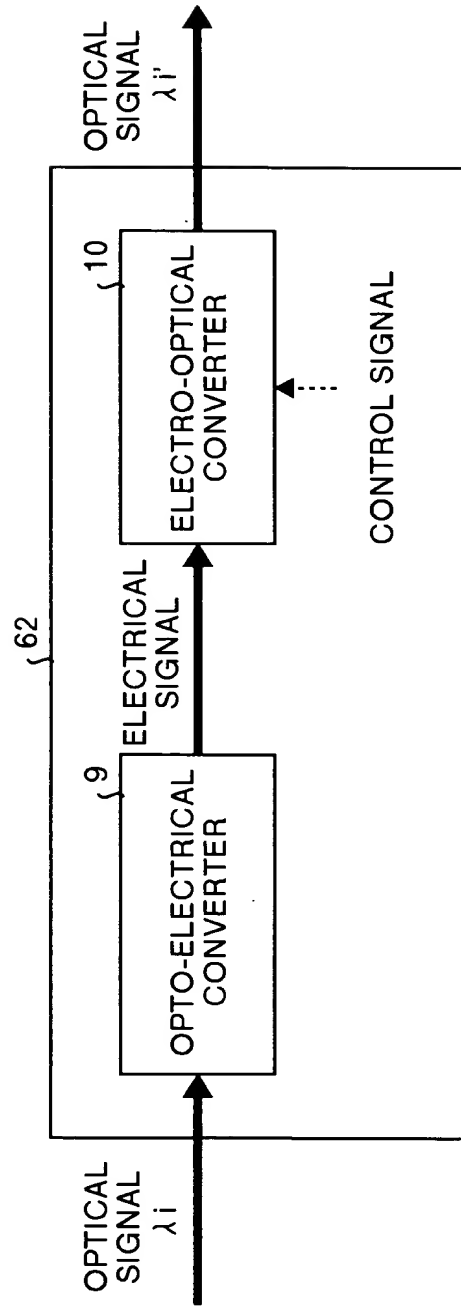


FIG. 9

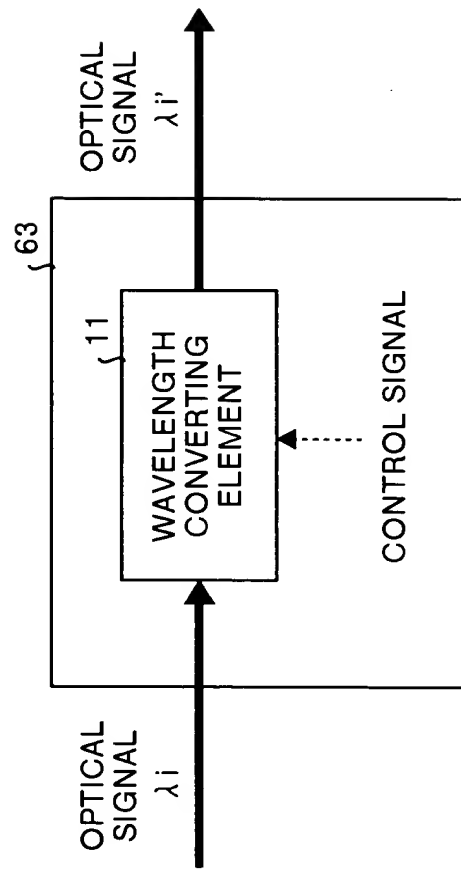


FIG.10

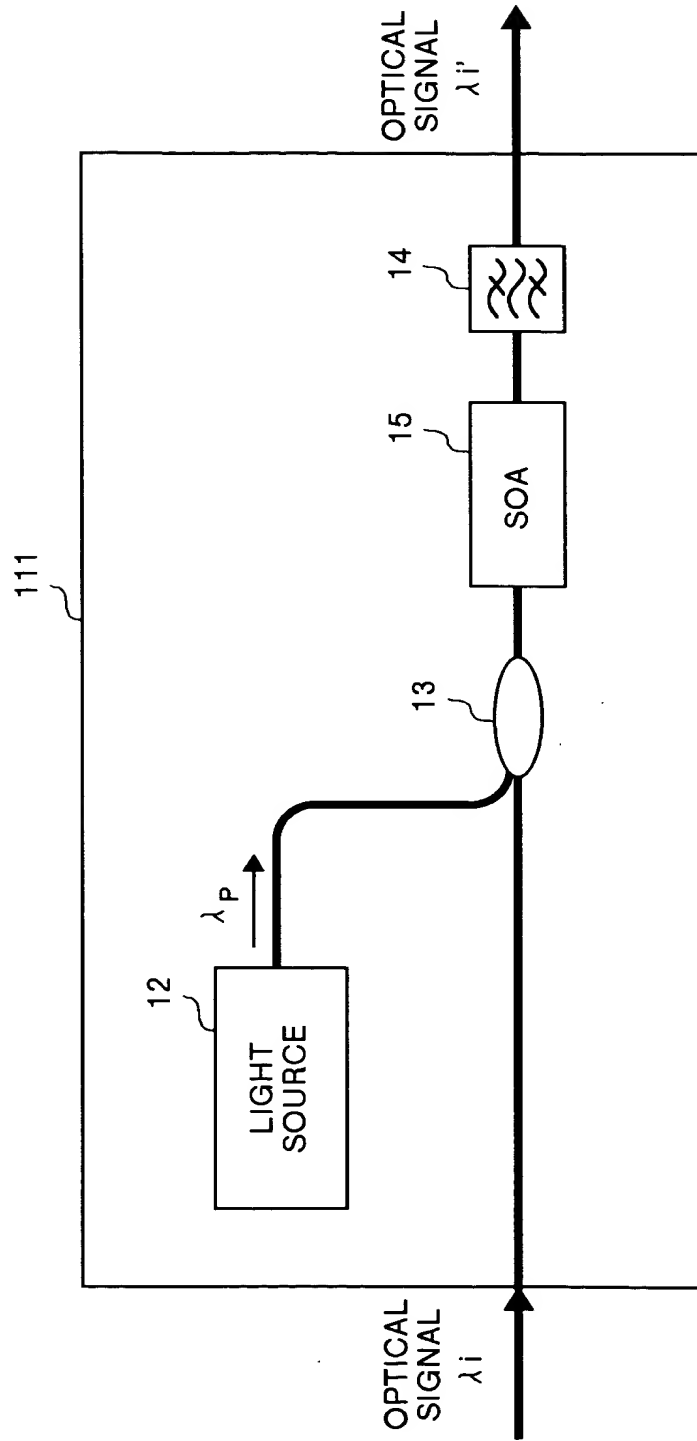


FIG.11

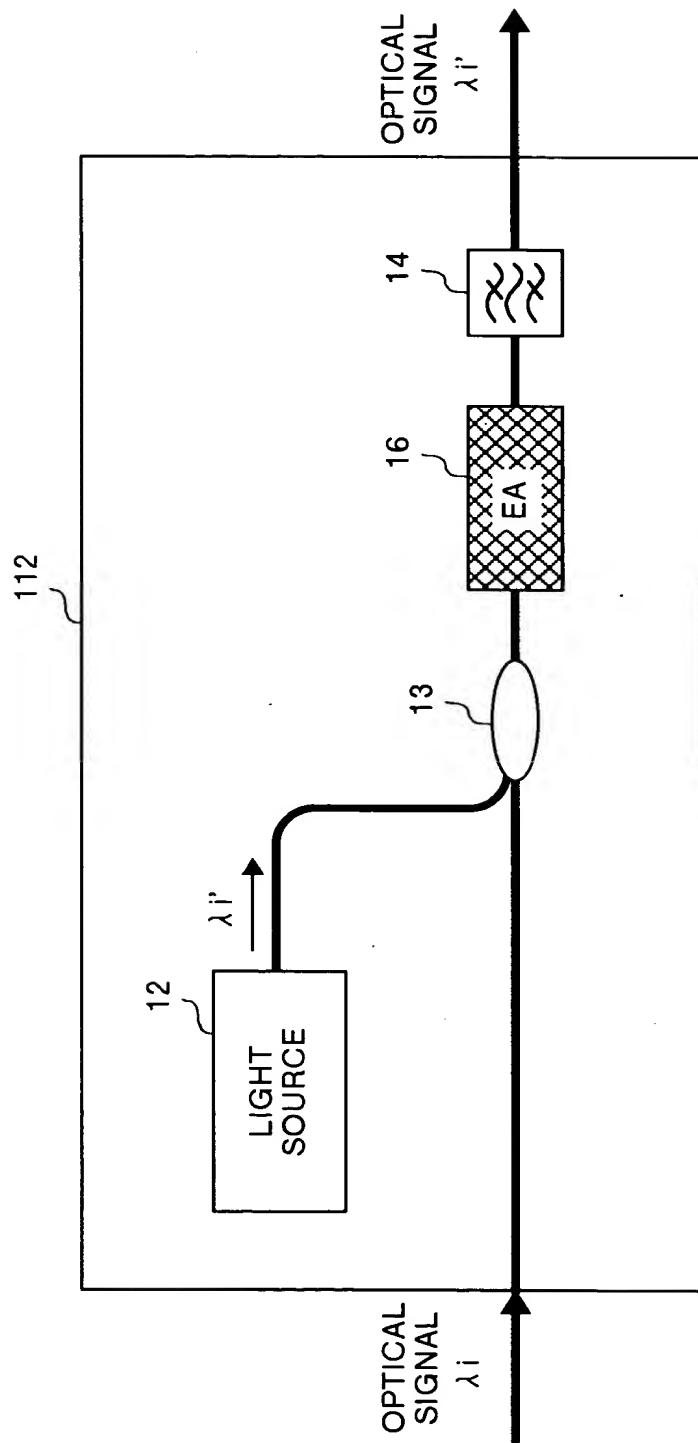


FIG.12

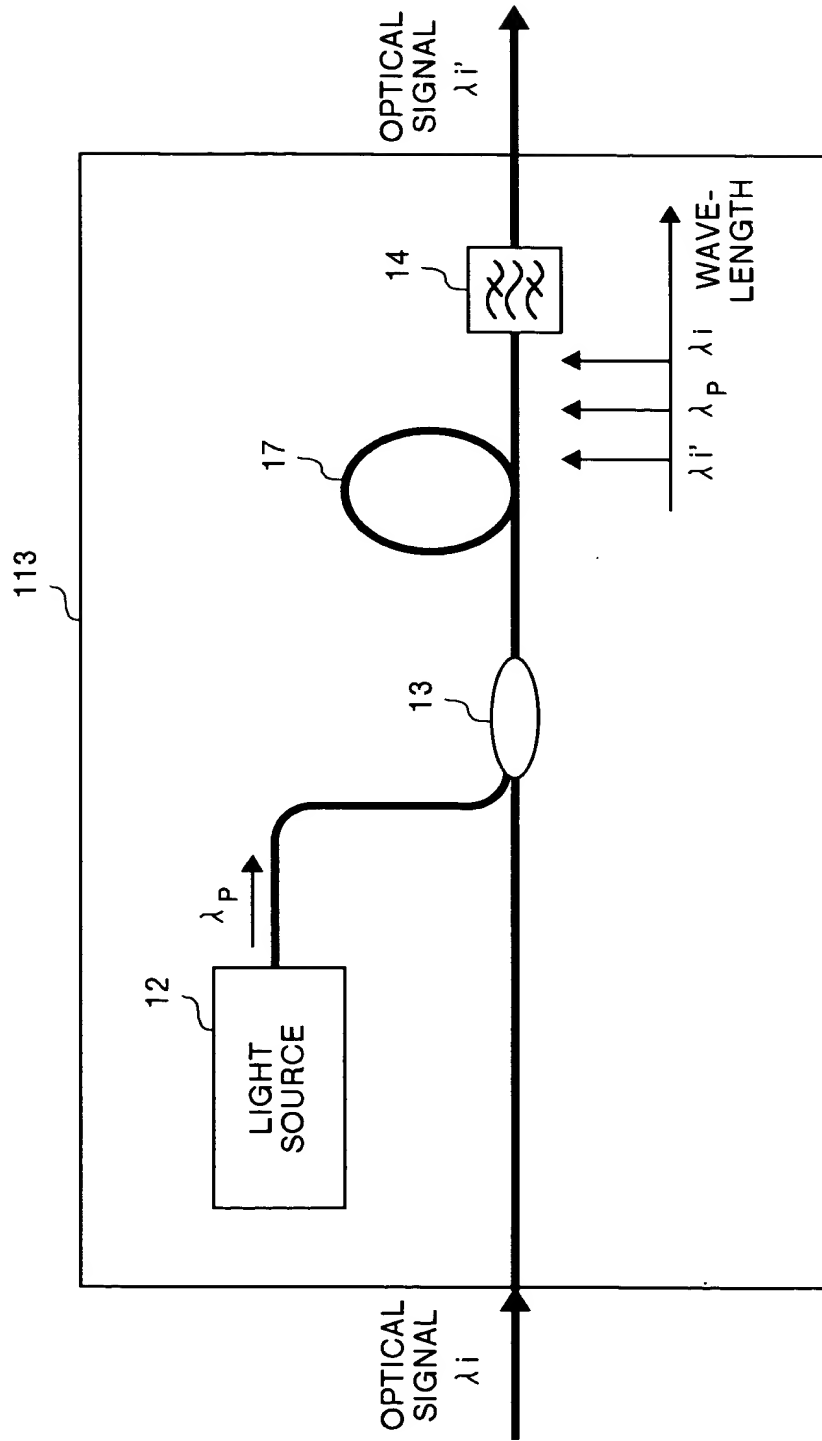


FIG. 12 is a schematic diagram of an optical system 113. The system 113 includes a light source 12, a waveguide 13, a lens 17, and a wave-length component 14. The light source 12 emits light with wavelength λ_P into the waveguide 13. The waveguide 13 contains the lens 17. The light passes through the lens 17 and the wave-length component 14 to produce an optical signal $\lambda_{i'}$. A vertical axis on the right is labeled WAVE-LENGTH and has tick marks for $\lambda_{i'}$, λ_P , and λ_i .

FIG.13A

ZERO-DISPERSION
WAVELENGTH

λ_0

CH1 CH2 CH3 CH_{n-1} CH_n

$\Delta\lambda$ $\Delta\lambda$

$\Delta\lambda$

λ_1 λ_2 λ_3 λ_{n-1} λ_n

WAVELENGTH

ZERO-DISPERSION
WAVELENGTH

λ_0

λ_0'

CH1 CH2 CH3 CH_{n-1} CH_n

$\Delta\lambda_1$ $\Delta\lambda_2$

$\Delta\lambda_{n-1}$

λ_1' λ_2' λ_3' λ_{n-1}' λ_n'

WAVELENGTH

FIG. 14A

FIG.14A

ZERO-DISPERSION
WAVELENGTH

λ_0

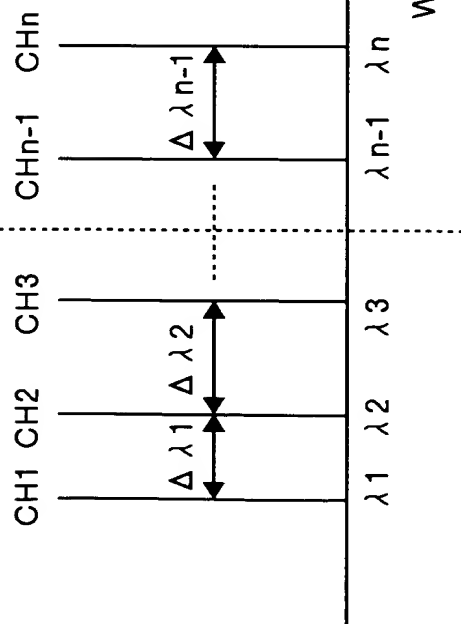


FIG.14B

ZERO-DISPERSION
WAVELENGTH

λ_0'

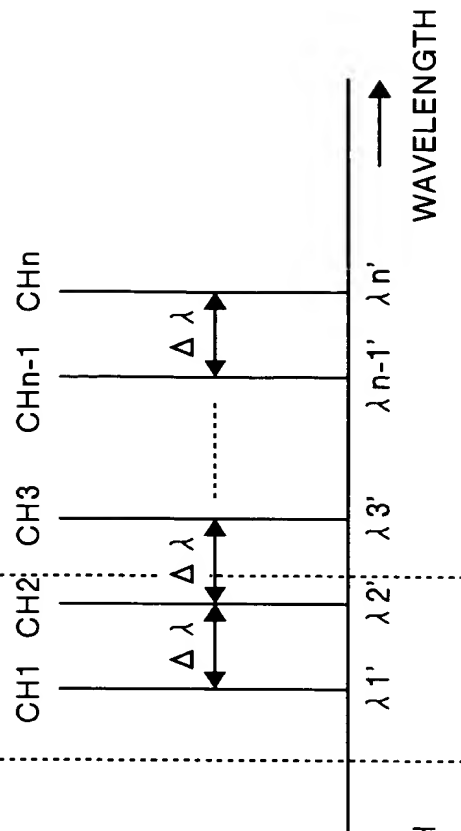


FIG.15A

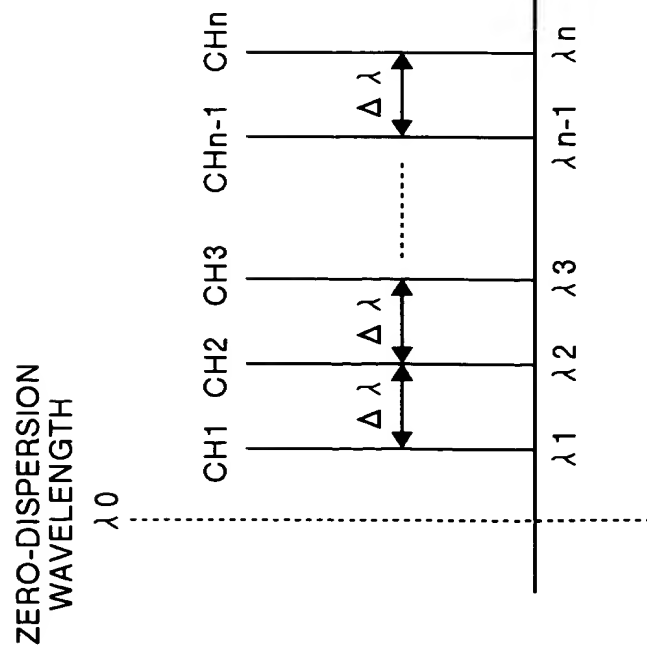


FIG.15B

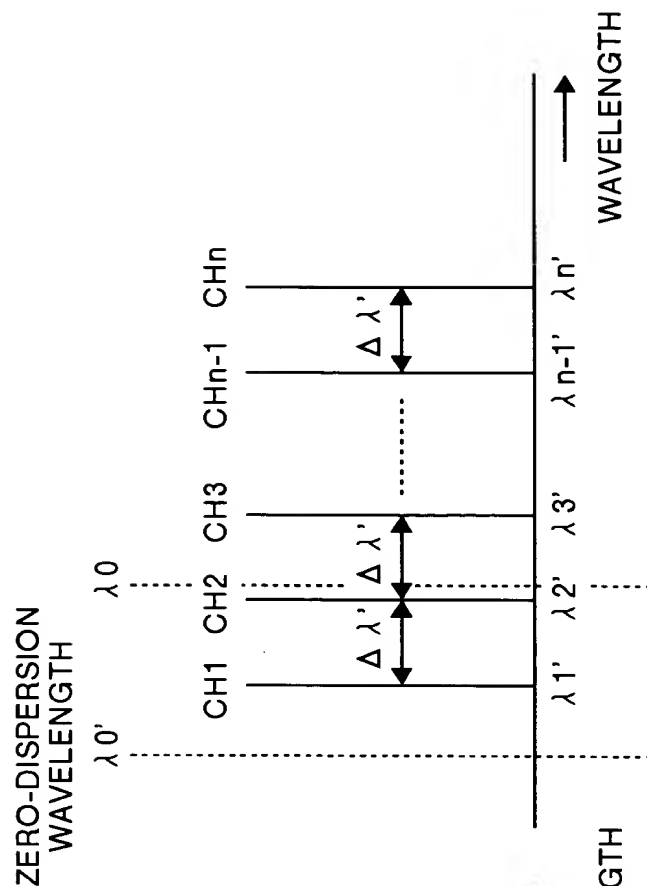


FIG.16A

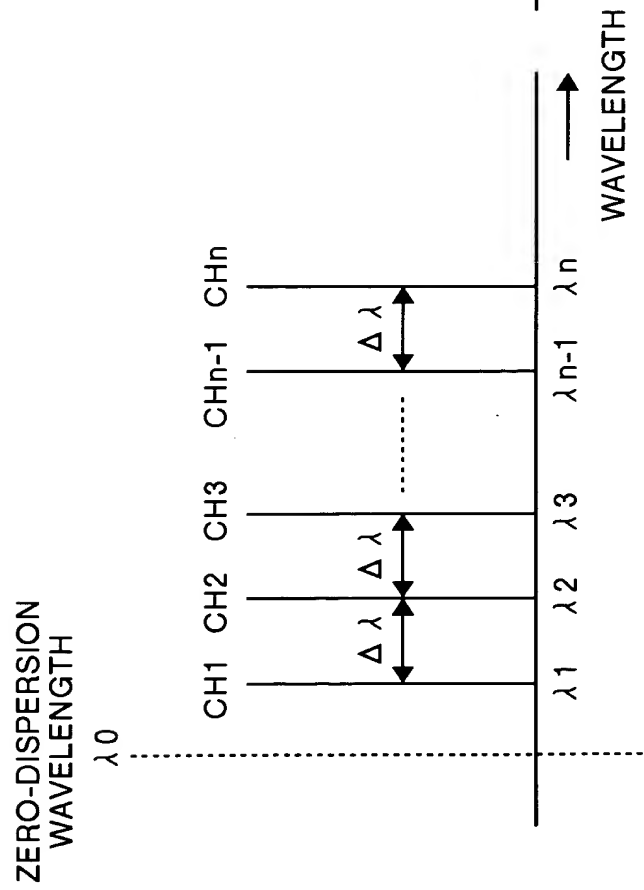


FIG.16B

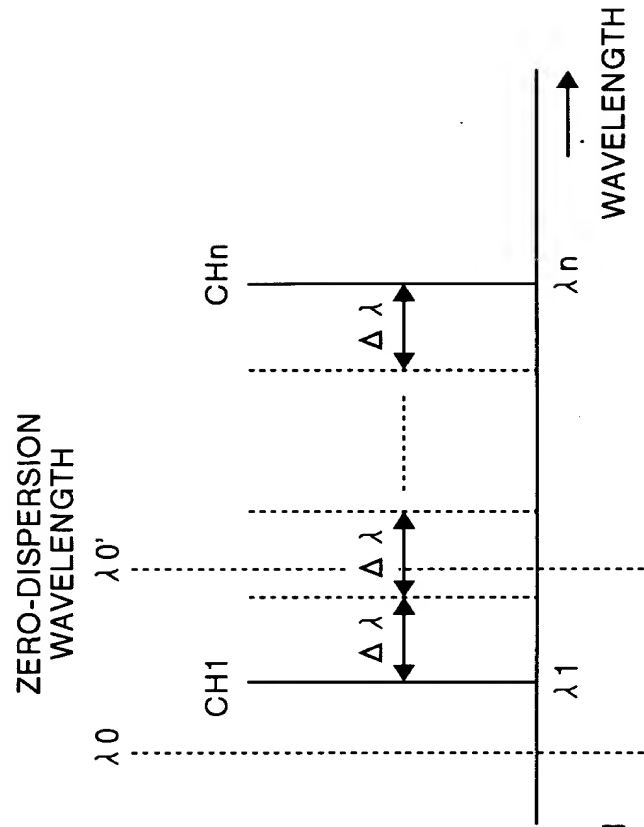


FIG.17

